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(71) Applicant *(for all designated States except US)*: **CHIRON SPA** [IT/IT]; Via Fiorentina, 1, I-53100 Sienna (IT).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GALEOTTI, Cesira** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **GRANDI, Guido** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **MASIGNANI, Vega** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **MORA, Mariarosa** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **PIZZA, Mariagrazia** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **RAPPUOLI, Rino** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **RATTI, Guilio** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **SCARLATO, Vincenzo** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT). **SCARSELLI, Maria** [IT/IT]; Via Fiorentina, 1, I-53100 Siena (IT).

(74) Agents: **HALLYBONE, Huw, George** et al.; Carpmaels & Ransford, 43 Bloomsbury Square, London WC1A 2RA (GB).

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(54) Title: NEISSERIAL ANTIGENIC PEPTIDES

(57) Abstract: This invention provides, among other things, proteins, polypeptides, and fragments thereof, derived from the bacteria *Neisseria meningitidis* B. Also provided are nucleic acids encoding for such proteins, polypeptides, and/or fragments, as well as nucleic acids complementary thereto *e.g.*, antisense nucleic acids). Additionally, this invention provides antibodies which bind to the proteins, polypeptides, and/or fragments. This invention further provides expression vectors useful for making the proteins, polypeptides, and/or fragments, as well as host cells transformed with such vectors. This invention also provides compositions of the proteins, polypeptides, fragments, and/or nucleic acids, for use as vaccines, diagnostic reagents, immunogenic compositions, and the like. Methods of making the compositions and methods of treatment with the compositions are also provided. This invention also provides methods of detecting the proteins, polypeptides, fragments, and/or nucleic acids.

150-AlaGlyLeuGluLeuIleArgLysLeuGlyGlyGluIle-162
165-AlaAlaAlaIleLeuGluPheThrAspLeuGlnGlyGlyLysAsnIleArg-181

Antigenic Index - Jameson-Wolf
4-LysThrSerAsnLeu-8
24-LeuAlaAspLysIleArgLysIleGluAsnTrpProGlnLysGly-38
66-MetAspGlnLysIleAspIle-72
76-LeuAspAlaArgGly-80
97-ProIleArgLysLysGlyLysLeuPro-105
117-TyrGlyGluAlaAlaVal-122
124-IleHisThrAspAlaValLysProGlySerArg-134
153-GluLeuIleArgLysLeuGlyGlyGluIleValGlu-164
172-ThrAspLeuGlnGlyGlyLysAsnIleArgAlaSerGlyAlaPro-186
192-GlnAsnGluGlyCysMetLysGly-199

Hydrophilic Regions - Hopp-Woods
24-LeuAlaAspLysIleArgLysIleGluAsnTrpPro-35
66-MetAspGlnLysIleAspIle-72
97-ProIleArgLysLysGlyLysLeuPro-105
117-TyrGlyGluAlaAlaVal-122
124-IleHisThrAspAlaValLysProGlySer-133
153-GluLeuIleArgLysLeuGlyGlyGluIleValGlu-164
178-LysAsnIleArgAlaSerGly-184
195-GlyCysMetLysGly-199
g149
AMPHI Regions - AMPHI
72-AsnLeuGlyAspAlaLeuAspGlyValProGlyIle-83
101-ThrGlyArgArgIleLysValLeuAsnHisHisGlyGluThrGlyAspMet-117
135-GlnValGluIleLeuArgGlyProValThr-144
152-ValAlaGlyLeuValAsp-157
164-ProGluLysMetProGluAsn-170
184-AsnLeuGluLysLeu-188
220-TyrArgAsnLeuLysArgLeuProAspSerHis-230
345-PheProGlyPheGlu-349
366-AlaGlyAspAlaValGluAsnPhePheAsnAsn-376
389-ProIleGlyArgLeuLys-394
411-AlaIleProGluThrVal-416
472-GlnProLeuProAspLeuGlyAla-479
565-ArgPheGlyAsnTyrIleTyrAlaGln-573
576-AsnAspGlyArgGlyProLysSerIleGluAsp-586
627-ArgGlyArgLeuLysAsnLeuProSer-635
672-LeuThrAspArgIle-676

Antigenic Index - Jameson-Wolf
25-HisGluThrGluGln-29
40-GlyLysSerArgProArgAlaThrSerGly-49
55-ThrAlaSerAspLysIleIleSerGlyAspThrLeuArgGlnLysAla-70
97-IleArgGlyGlnThrGlyArgArgIleLysVal-107
109-AsnHisHisGlyGluThrGlyAspMetAlaAspPheSerProAspHis-124
137-GluIleLeuArgGlyPro-142
157-AspValAlaAspGlyLysIleProGluLysMetProGluAsnGlyValSerGlyGluAlaGlyLeu-178
180-LeuSerSerGlyAsnLeuGluLysLeuThrSer-190
207-GlyLeuTyrArgLysSerGlyAspTyrAlaValProArgTyrArgAsnLeuLysArgLeuProAspSerHis
AlaAspSerGlnThrGly-236
244-GlyGluLysGlyPhe-248

221-SerAsnAlaGluLysIleAlaArgIleAsnArgAlaLysGlyGluAlaGluSerLeuArgLeu-241
245-AlaAsnAlaGluAlaIleArg-251
281-LeuAlaLysGluSerAsn-286
306-LysIleIleAspSerSerLysThrAlaLys-315
g520-1
AMPHI Regions - AMPHI
109-AspGlyGlnIleTrpArgAlaPheSerSerLeuLys-120

Antigenic Index - Jameson-Wolf
20-LysProSerArgArgAlaLeu-26
47-AlaSerGlyLysIleSerLeuPro-54
84-ProProAsnAsnSerThrThrThrSerThrSerLeuArgAlaThrSerSerAsnGlySerLeuThrLysAlaA
laAsp-109
122-HisMetAlaGluIleArgIleSerArgProLysArgArgGluIleSerSerAlaLeuSerArgAsnThrAla
AlaAlaPro-148
150-ProThrValProLysProLysArgProMet-159
166-SerProCysLysProThrGluMet-173

Hydrophilic Regions - Hopp-Woods
20-LysProSerArgArgAlaLeu-26
93-ThrSerLeuArgAlaThrSerSer-100
103-SerLeuThrLysAlaAlaAsp-109
122-HisMetAlaGluIleArgIleSerArgProLysArgArgGluIleSer-137
140-LeuSerArgAsnThrAla-145
151-ThrValProLysProLysArgProMet-159
168-CysLysProThrGluMet-173
g521
AMPHI Regions - AMPHI
39-ThrLysProSerLysSerCys-45
50-LeuProProIleGly-54
86-ValLysThrValSerLysProAlaLysSer-95
126-AlaGlnLysMetLeu-130
132-GlnAlaArgLeuAlaLysGlyGlyAsn-140
146-IleAsnAlaLeuSerAsnValLeuAspArgGlnGlnAsnIle-159

Antigenic Index - Jameson-Wolf
1-MetLysSerLysLeu-5
36-ValTyrThrThrLysProSerLysSerCysHisSerThrAspLeuProProIleGlyAsnTyrSerSerGluA
rgTyrIle-62
65-GlnThrProGluProAlaProSerProSerAsnGlyGlyGln-78
80-ValLysTyrLysAlaProVal-86
88-ThrValSerLysProAlaLysSerAsnThrProProGlnGlnAlaProValAsnAsnSerArgArgSerIleL
euGluAlaGluLeuSerAsnGluArgLysAlaLeuThrGluAlaGlnLysMetLeuSer-131
134-ArgLeuAlaLysGlyGlyAsnIleAsnHisGlnLys-145
152-ValLeuAspArgGlnGlnAsn-158
162-LeuGlnArgGluLeuGlyArg-168

Hydrophilic Regions - Hopp-Woods
1-MetLysSerLysLeu-5
40-LysProSerLysSerCysHis-46
57-SerSerGluArgTyrIle-62
66-ThrProGluProAlaProSerProSerAsnGly-76
80-ValLysTyrLysAlaProVal-86
88-ThrValSerLysProAlaLysSerAsnThrPro-98